

| <u>DB Name</u> | <u>Query</u> | <u>Hit Count</u> | <u>Set Name</u> |
|----------------|---|------------------|-----------------|
| PGPB | ((her-2) or her2 or (c-erb-B2) or (erb-B2) or (c-erb-b-2)) | 5 | <u>L17</u> |
| JPAB,EPAB,DWPI | 115 and 113 | 1 | <u>L16</u> |
| JPAB,EPAB,DWPI | t near cell near epitope\$1 | 362 | <u>L15</u> |
| JPAB,EPAB,DWPI | 112 and 113 | 0 | <u>L14</u> |
| JPAB,EPAB,DWPI | ((her-2) or her2 or (c-erb-B2) or (erb-B2) or (c-erb-b-2)) | 87 | <u>L13</u> |
| JPAB,EPAB,DWPI | \$3apeptide | 926 | <u>L12</u> |
| USPT | 19 same l3 | 0 | <u>L11</u> |
| USPT | 19 and l3 | 13 | <u>L10</u> |
| USPT | \$3apeptide | 3876 | <u>L9</u> |
| USPT | \$peptide | 52872 | <u>L8</u> |
| USPT | 15 same l3 | 1 | <u>L7</u> |
| USPT | 15 and l3 | 34 | <u>L6</u> |
| USPT | t near cell near epitope\$1 | 708 | <u>L5</u> |
| USPT | 11 and l3 | 0 | <u>L4</u> |
| USPT | ((her-2) or her2 or (c-erb-B2) or (erb-B2) or (c-erb-b-2)) | 516 | <u>L3</u> |
| USPT | 11 and ((her-2) or her2 or (c-erb-B2) or (erb-B2) or (c-erb-b-2)) | 0 | <u>L2</u> |
| USPT | nonapeptides | 248 | <u>L1</u> |

WEST

Generate Collection

L17: Entry 3 of 5

File: PGPB

Jul 5, 2001

PGPUB-DOCUMENT-NUMBER: 20010007152

PGPUB-FILING-TYPE: new-utility

DOCUMENT-IDENTIFIER: US 20010007152 A1

TITLE: RECOMBINANT CONSTRUCTS ENCODING T CELL RECEPTORS SPECIFIC
FOR HUMAN HLA-RESTRICTED TUMOR ANTIGENS

PUBLICATION-DATE: July 5, 2001

INVENTOR-INFORMATION:

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APPL-NO: 08/ 812393

DATE FILED: March 5, 1997

CONTINUED PROSECUTION APPLICATION: CPA

RELATED-US-APPL-DATA:

| RLAN | RLFD | RLPC | RLKC | RLAC |
|----------|-------------|------|------|------|
| 60012845 | Mar 5, 1996 | | | US |

INT-CL: [07] A01K 67/027

US-CL-PUBLISHED: 800/4; 800/21, 435/91.1, 435/91.2

US-CL-CURRENT: 800/4; 435/91.1, 435/91.2, 800/21

REPRESENTATIVE-FIGURE: NONE

ABSTRACT:

Methods are described to obtain nucleic acid molecules that encode T cell receptors and their derivatives that are human HLA-restricted and which are specific for tumor-associated antigens found in human tumors. These nucleic acids are useful in preparing recombinant cells for diagnosis and therapy of human tumors.

L5 ANSWER 7 OF 7 BIOSIS COPYRIGHT 2001 BIOSIS
 ACCESSION NUMBER: 1995:111204 BIOSIS
 DOCUMENT NUMBER: PREV199598125504
 TITLE: Sequence motifs of human **HER-2**
 proto-oncogene important for peptide binding to HLA-A2.
 AUTHOR(S): Fisk, Bryan; Chesak, Brad; Ioannides, Maria G.; Wharton,
 J.
 CORPORATE SOURCE: Taylor; Ioannides, Constantin G. (1)
 (1) Dep. Gynecol. Oncol., 1515 Holcombe Boulevard, Box 67,
 Houston, TX 77030 USA
 SOURCE: ~~International Journal of Oncology, (1994) Vol. 5, No. 1,~~
 pp. 51-63.
 ISSN: 1019-6439.
 DOCUMENT TYPE: Article
 LANGUAGE: English
 AB Tumor progression and metastasis are often associated with overexpression
 of specific cellular proteins. In 1991, we introduced a hypothesis that
 epitopes of nonmutated overexpressed proteins can be targets of a
 specific
 cellular immune response against tumor mediated by T cells (Mol
 Carcinogen
 6: 77-81, 1992) and that, when T cell epitopes are present, distinction
 between tumor immunity/autoimmunity and unresponsiveness can be
 predicated
 on the protein concentration as a limiting factor of epitope supply. In
 support of this hypothesis, we demonstrated that CTL from patients with
 ovarian tumors which overexpress **HER-2** protooncogene
 can recognize both autologous tumor and synthetic analogs of a specific
 epitope from **HER-2**, which was identified based on the
 convergence of all criteria for selection of HLA-A2 associated epitopes
 recognized by T cells. In this study, we identified all epitopes in
HER-2 containing **nonapeptides** with HLA-A2
 anchors. Of these, analysis of potential amphiphilic sites identified
 both
 sequences and specific mutations that positively affected the reactivity
 of conformationally dependent HLA-A2 specific mAb which served as an
 indication of **HER-2** peptide binding. We also report
 the in vitro induction of cellular responses to these peptides by PBMC
 from healthy HLA-A2+ volunteers as an indication of their ability to
 stimulate/restimulate preexisting T cell responses to **HER-**
2. The peptides induced proliferative responses in one of four
 donors tested and CTL responses (one of three peptides tested in two of
 three donors). This strategy may allow selection of immunogenic
HER-2 peptides and elucidation of mechanisms operating
 in induction of tolerance to defined epitopes on self-proteins.

5,434,076